



Attorney Docket No. 230  
**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: **Munger et al.**

Serial No.: **08/900,752**

Group No.: **1205**

Filed: **July 25, 1997**

Examiner: **unassigned**

For: **NUCLEOTIDE ANALOG COMPOSITION AND SYNTHESIS METHOD**

#5  
#10  
4.24.98

**Assistant Commissioner for Patents**  
**Washington, D.C. 20231**

**INFORMATION DISCLOSURE STATEMENT (modified)**

**List of Sections Forming Part of This Information Disclosure Statement**

The following sections are being submitted for this Information Disclosure Statement:

1. ☒ Preliminary Statements
2. ☒ FORM PTO - 1449 (Modified)
3. ☒ Copies of Listed Information Items Accompanying This Statement

**Section 1. Preliminary statements**

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97 (g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

**CERTIFICATE OF MAILING**

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

**Robin Torres**

(Type or print name of person mailing paper)

Date: April 16, 1998

(Signature of person mailing paper)

**Section 3. Copies of Listed Information Items Accompanying This Statement**

Legible copies of all items listed in Form PTO-1449 accompany this information statement.

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FORM PTO-1449

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| <b>U.S. DEPARTMENT OF COMMERCE<br/>PATENT AND TRADEMARK OFFICE</b><br><br><b>INFORMATION DISCLOSURE STATEMENT<br/>BY APPLICANT</b><br><br>(37 CFR 1.98(b)) | ATTORNEY DOCKET NO.: 230 | SERIAL NO.: 08/900,752 |
|  | APPLICANT: Munger et al. |                        |
|  | FILING DATE: 7/25/97     | GROUP ART UNIT: 1205   |

**U.S. PATENT DOCUMENTS**

| EXAMR'S INITIALS | PATENT NO. | ISSUE DATE | PATENTEE             | CLASS/<br>SUBCLASS | FILING DATE |
|------------------|------------|------------|----------------------|--------------------|-------------|
| gtr              | 5,618,964  | 4/8/97     | Cheng et al.         | —                  | 6/7/95      |
| gtr              | 5,663,159  | 9/2/97     | Starrett, Jr. et al. | 514/181            | 10/11/94    |

**FOREIGN PATENT DOCUMENTS**

| EXAMR'S INITIALS | PATENT NO.  | PUBLICATION DATE | COUNTRY | CLASS/<br>SUBCLASS | TRANSLATION YES/NO |
|------------------|-------------|------------------|---------|--------------------|--------------------|
| gtr              | WO 96/18605 | 6/20/96          | PCT     | —                  |                    |

**OTHER DOCUMENTS**

| EXAMR'S INITIALS | ARTICLE   |
|------------------|---|
| gtr              | Arimilli et al., "Synthesis, in vitro biological evaluation and oral bioavailability of 9-[2-(phosphonomethoxy)propyl]adenine (PMPA) prodrugs", 8(6):557-567, ANTIVIRAL CHEM & CHEMO, 1997        |
| gtr              | Arimilli et al., "Orally Bioavailable Acyclic Nucleoside Phosphonate Prodrugs: Adefovir Dipivoxil and Bis(POC)PMPA", Vol. 3 (accepted for publication), ADV ANTIVIRAL DRUG DESIGN, 1998           |
| gtr              | Robinson et al., "Discovery of the Hemifumarate and (alpha-L-Alanyloxy)methyl Ether as Prodrugs of an Antirheumatic Oxindole: Prodrugs for the Enolic OH Group", 39:10-18, J MED CHEM, 1996       |
| gtr              | Safadi et al., "Phosphoryloxymethyl Carbamates and Carbonates--Novel Water-Soluble Prodrugs for Amines and Hindered Alcohols", 10(9):1350-1355, PHARM RES, 1993                                   |
| gtr              | Sakamoto et al., "Studies on Prodrugs. II. Preparation and Characterization of (5-Substituted 2-Oxo-1,3-dioxolen-4-yl)methyl Esters of Ampicillin", 32(6):2241-2248, CHEM PHARM BULL, 19-Aug-1983 |
| gtr              | Shaw et al., "Metabolism and Pharmacokinetics of Novel Oral Prodrugs of 9-[(R)-2-(phosphonomethoxy)propyl]adenine (PMPA) in Dogs", 14(12):1824-1829, PHARM RES, 1997                              |
| gtr              | Srivastva et al., "Bioreversible Phosphate Protective Groups: Synthesis and Stability of Model Acyloxymethyl Phosphates", 12:118-129, BIOORG CHEM, 1984   |

|   |                                 |
|---|---------------------------------|
| EXAMINER <i>James H. Heamer</i>   | DATE CONSIDERED <i>11/23/98</i> |
| EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                                 |